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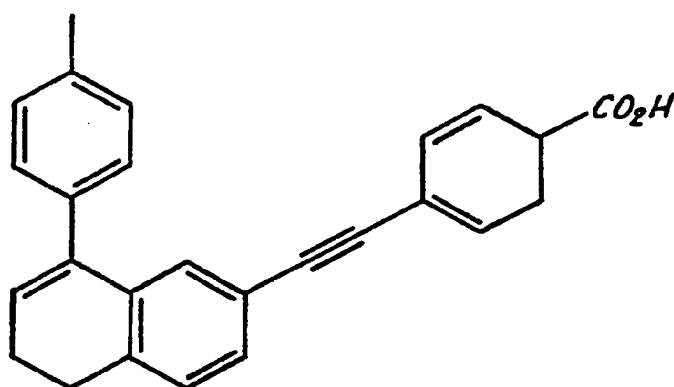
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(54) **Synthesis and use of retinoid compounds having negative hormone and/or antagonist activities**

(57) Aryl-substituted and aryl and (3-oxo-1-propenyl)-substituted benzopyran, benzothiopyran, 1,2-dihydroquinoline, and 5,6-dihydronaphthalene derivatives have retinoid negative hormone and/or antagonist-like biological activities. The invented RAR antagonists can be administered to mammals, including humans, for the purpose of preventing or diminishing action of RAR agonists on the bound receptor sites. Specifically, the RAR agonists are administered or coadministered with retinoid drugs to prevent or ameliorate toxicity or side effects caused by retinoids or vitamin A or vitamin A precursors. The retinoid negative hormones can be used to potentiate the activities of other retinoids and nuclear receptor agonists. For example, the retinoid negative hormone called AGN 193109 effectively

EP 1 535 919 A3



increased the effectiveness of other retinoids and steroid hormones in *in vitro* transactivation assays. Additionally, transactivation assays can be used to identify compounds having negative hormone activity. These assays are based on the ability of negative hormones to down-regulate the activity of chimeric retinoid receptors engineered to possess a constitutive transcription activator domain.



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PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 05 00 4430 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
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X	WO 97/09297 A (ALLERGAN) 13 March 1997 (1997-03-13) * page 77 - page 81; claims 1-31,120; example 40 * -----	1,2,12, 27-34	
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			C07D C07C C07F A61K A61P
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
The Hague		1 September 2005	Francois, J
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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EPO FORM 1503 03.82 (P04C07)



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**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 05 00 4430

Although claims 27-34 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

**ANNEX TO THE EUROPEAN SEARCH REPORT
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